

Claims

[c1] What is claimed is:

1. A method of fabricating an integrated circuit, the integrated circuit having a semiconductor body, the method comprising following steps:

(a)forming a plurality of basic units on the semiconductor body, each of the basic units having an identical device characteristic; and

(b)forming at least a layout layer to program the basic units for generating a clocked logic circuit and a non-clocked logic circuit without placing restrictions on positions of the clocked logic circuit and the non-clocked logic circuit on the semiconductor body.

[c2] 2. The method of claim 1 wherein step (a) forms at least a transistor within each of the basic units.

[c3] 3. The method of claim 2 wherein the transistor is an MOS transistor.

[c4] 4. The method of claim 1 wherein step (b) utilizes the layout layer to program a basic unit for generating the clocked logic circuit.

- [c5] 5. The method of claim 1 wherein step (b) utilizes the layout layer to program a plurality of basic units for generating the clocked logic circuit.
- [c6] 6. The method of claim 1 wherein step (b) utilizes the layout layer to program a basic unit for generating the non-clocked logic circuit.
- [c7] 7. The method of claim 1 wherein step (b) utilizes the layout layer to program a plurality of basic units for generating the non-clocked logic circuit.
- [c8] 8. The method of claim 1 wherein step (a) forms at least a PMOS transistor and at least an NMOS transistor within each of the basic units.
- [c9] 9. A method of fabricating an integrated circuit, the integrated circuit having a semiconductor body, the method comprising following steps:
(a)forming a plurality of basic units on the semiconductor body, each of the basic units having a plurality of first transistors cascaded in a series and a plurality of second transistors cascaded in a series; and
(b)forming at least a layout layer to program traces among the first transistors and the second transistors of at least a basic unit for controlling the basic unit to form either a clocked logic circuit or a non-clocked logic cir-

cuit.

- [c10] 10. The method of claim 9 wherein the first transistors are not electrically connected to the second transistors before the traces are programmed.
- [c11] 11. The method of claim 9 wherein the first transistors and the second transistors are MOS transistors.
- [c12] 12. The method of claim 11 wherein the first transistors are PMOS transistors, and the second transistors are NMOS transistors.
- [c13] 13. The method of claim 9 wherein step (b) utilizes the layout layer to program the basic units for generating the clocked logic circuit.
- [c14] 14. The method of claim 9 wherein step (b) utilizes the layout layer to program the basic units for generating the non-clocked logic circuit.
- [c15] 15. An integrated circuit comprising:
 - a semiconductor body for positioning a plurality of basic unit, each of the basic units having an identical device characteristic;
 - a clocked logic circuit formed on the semiconductor body, the clocked logic circuit being formed by at least a basic unit; and

a non-clocked logic circuit formed on the semiconductor body, the non-clocked logic circuit being formed by at least a basic unit;

wherein the semiconductor body does not limit locations of the clocked logic circuit and the non-clocked logic circuit on the semiconductor body.

[c16] 16. The integrated circuit of claim 15 wherein each of the basic units comprises at least a transistor.

[c17] 17. The integrated circuit of claim 16 wherein the transistor is a MOS transistor.

[c18] 18. The integrated circuit of claim 15 wherein each of the basic units comprises at least a PMOS transistor and at least an NMOS transistor.

[c19] 19. An integrated circuit comprising:
a semiconductor body for positioning a plurality of basic units, each of the basic units having a plurality of first transistors cascaded in a series and a plurality of second transistors cascaded in a series;
a clocked logic circuit formed on the semiconductor body, the clocked logic circuit being formed by at least a basic unit; and
a non-clocked logic circuit formed on the semiconductor, the non-clocked logic circuit being formed by at

least a basic unit.

- [c20] 20. The integrated circuit of claim 19 wherein the first transistors are not electrically connected to the second transistors.
- [c21] 21. The integrated circuit of claim 19 wherein the first transistors and the second transistors are MOS transistors.
- [c22] 22. The integrated circuit of claim 21 wherein the first transistors are PMOS transistors, and the second transistors are NMOS transistors.